

Attorney Docket No. 13625-003001
Serial No.: 10/039,687
Amendment dated March 17, 2004
Reply to Office Action dated October 22, 2003

REMARKS

Claims 1-31 were originally filed in this application. As a result of an election in response to a restriction requirement, Applicant elected species 1 claims 5-8 and 22-25 with generic claims 1-4, 17-21 and 31. In this response, claims 1-19, 21, 25, 27 and 31 have been amended. No claims have been deleted or added. Consequently, claims 1-8, 17-25 and 31 remain under consideration. Support for the amendments to claims 1 and 18 can be found at page 5, line 33 to page 6, line 33 and in the drawings. Therefore, no new matter has been added. Amendment of a claim is not to be construed as a dedication to the public of any subject matter.

The Examiner has objected to claims 1, 3, 4, 7-8, 17-21, 25 and 31 due to various informalities. By way of appropriate correction to claims 1, 3, 7-8, 17-21 and 25, these objections have been overcome. With reference to the objection as contained in paragraph 1(d) of the office action, it is respectfully submitted that the use of the indefinite article preceding the term "composite image" is correct in claims 4 and 21 and that no correction is required.

While the Examiner has indicated that there is an objection to claim 31 due to an informality, the Examiner has not

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indicated what the informality is. Consequently, the Applicant does not know what correction is required.

Claims 17-31 stand rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The dependency of each of claim 17 and claim 31 has been corrected. Claim 17 should more correctly depend from claim 16 and claim 31 should depend more correctly from claim 30. These amendments have been made. As a result, the amendments have resulted in claim 17 and 31 both depending from non-elected claims. Nevertheless, for the reasons set forth below, claims 17 and 31 have been amended together with the claims from which they depend in order more clearly to define the invention.

It is respectfully submitted that, by way of this amendment, the rejection of claims 17 and 31 has been overcome.

Claims 1-8, 17-25 and 31 stand rejected under 35 USC §103(a) as being unpatentable over US Patent No. 6,359,619 to Waters et al (referred to below as "Waters").

With regard to Waters, the office action states as follows:-

- a. As per claim 1-2, Waters discloses a graphic package for use in a system. The package includes a

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storage device for storing data of non-varying parts (col. 6, lines 22-24; and col. 3, lines 52-57), an image operating means for generating the 3D additional parts of the image (col. 5, lines 41-43; col. 7, lines 21-23; and col. 11, lines 28-34). Waters does not disclose that the additional parts are dependent on the game outcome. However, Waters discloses that the graphic package of Waters can be implemented in game machines that show or hide details (col. 5, lines 53-62). An ordinary skill in the art at the time the invention was made would be able to use the additional parts as the output of the game outcome in order to facilitate showing or hiding the outcome of the game.

b. As per claim 3-8 and 17, rendering 3D images using 3D computer rendering software, compositing images to be displayed, using Z buffer compositor, Z buffer depth value, etc. would have been well known to a person of ordinary skill in the art at the time the invention was made.

c. As per claim 18-19, refer to discussion in claim 1 above;

d. As per claim 20, determining the game outcome would have been well known.

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e. As per claim 21-25 and 31, refer to discussion in claims 4-7 and 17 above.

The office action asserts that one of ordinary skill in the art at the time the invention was made "would be able to use the additional parts as the output of the game outcome in order to facilitate showing or hiding the outcome of the game".

It is respectfully submitted that claims 1 and 18 define very different subject matter.

Claim 1 states that there is a storage device for storing data relating to non-varying parts of an image and that these non-varying parts are independent of a game outcome of a game played on the gaming machine. Furthermore, there is an image generating means for generating simulated three-dimensional additional parts of the image. These additional parts are specified as being dependent on the game outcome.

Similarly, claim 18 specifies storing data relating to non-varying parts of the image and that, once again, these non-varying parts of the image are independent of the game outcome. A further step in the method includes generating simulated three-dimensional additional parts of the image, the additional parts being dependent on the game outcome.

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Thus, the present invention specifically claims that the additional parts are dependent on the game outcome. One of ordinary skill in the art would understand this to mean that these additional parts are displayed to contribute to or to illustrate the game outcome.

There is no hint, teaching or suggestion in Waters of storing game outcome independent parts of an image and separately generating game outcome dependent parts of the image.

There is no teaching in Waters that the non-varying parts of the image are pre-rendered. Once again, one of ordinary skill in the art will understand that in the present invention as claimed the storage device has pre-rendered non-varying parts of the image stored therein. By definition, because the parts of the image are stored, they must have been pre-rendered.

In contrast, the simulated three-dimensional additional parts of the image, which one understands to include varying parts, are game outcome dependent, are generated in real-time and are composited with the non-varying parts.

A detailed reading of Waters indicates that Waters needs additional factoring steps. This require additional processor usage and memory usage which is not required in the present invention. It will be appreciated that, in gaming machines due to all the graphics, the game mathematics and the processing

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required, there is a great deal of memory usage. Any technique which can reduce memory usage but still provide an attractive and entertaining graphical display would be of great benefit. It is respectfully submitted that the invention as presently claimed provides just such a technique and that this technique cannot be achieved by the teachings of Waters.

In fact, reference to column 6, lines 52-58 of Waters shows that Waters is dealing with an entirely different problem than that solved by the present invention. While Waters teaches that there is a major part of the image which does not vary, this by itself does not suggest Applicants' claims the present invention may generate images associated with a game outcome as rapidly as possible. It will be appreciated that, in a gaming machine where a bonus feature is provided having a graphics package to which the present invention applies, the game outcome is unknown. There is therefore no evolving scene description to begin with, as taught by Waters. There is also no possibility to predict what the outcome of the game will be and to rely on such a prediction to generate images and their parameters as suggested by Waters at column 5, lines 58-62.

More importantly, the Waters citation describes that the dynamic phase of the multi-phase rendering, being the central feature of the multi-phase rendering, operates on the entire

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scene (ie, every object) for every image - Column 7, lines 21-23 (Applicant's emphasis). This teaches directly away from the present invention as the present invention does not conduct any rendering on the non-varying parts and relies only on stored data related to those non-varying parts. The only rendering which occurs is in respect of the varying parts and, even then, only portions of those parts.

Therefore, Waters, when read as a whole, teaches away from the present claims.

There are numerous different ways in which multi-phase rendering can be effected. Waters teaches but one way, which is in no way related to the present invention as claimed. Because Waters requires that the dynamic phase of the multi-phase rendering acts on every object in every scene of the image, this results in greater memory usage. As indicated above, memory usage in a gaming machine is at a premium. Therefore one of ordinary skill in the art of gaming machines would not have recourse to the teachings of Waters in order to arrive at the present invention as claimed. There would be no reasonable prospect of successfully using the teachings of Waters in a gaming machine.

The Office Action indicates that, in the opinion of the Examiner, Waters can be implemented in game machines

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(Applicant's emphasis). There is a great deal of difference between a game machine on which video games are played and a gaming machine where a player bets money, or money's worth, in order to play a game on the gaming machine. One of ordinary skill in the art would readily understand that the requirement for displaying graphics on a gaming machine differ substantially from those on a game machine.

It is respectfully submitted that the rejection is not having consideration to the claimed invention as a whole in assessing the patentability of the present invention (Applicant's emphasis). In addition, insofar as Waters is concerned, the rejection is not considering this citation as a whole. For the reasons given above, if the claimed invention as a whole is considered and compared with Waters as a whole, it would readily be apparent to one of ordinary skill in the field that what is now claimed is not taught, suggested or hinted at by Waters and that one of ordinary skill in the art would not rely on the teachings of Waters.

In addition, as indicated above, Waters does not teach all of the claim limitations. In particular, Waters does not teach that the non-varying parts of the images are independent of a game outcome and that the additional, simulated three-dimensional part are dependent on the game outcome. As it is

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well established that all words in a claim must be considered in judging the patentability of that claim against the prior art, it is respectfully submitted that Waters fails this test and therefore does not render obvious the current claims. There is simply no reasonable prospect of successfully applying the teachings of Waters in order to arrive at the present invention as claimed.

It is respectfully submitted that the invention as now claimed is inventive and that the rejection under 35 USC §103(a) should be withdrawn.

Since generic claims are allowable, it is respectfully suggested that the non-elected claims should be examined since they depend from now-allowable claims.

In view of the above amendments and remarks, therefore, all of the claim should be in condition for allowance. A formal notice to that effect is respectfully solicited.

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Conclusion

Applicant has fully responded to each matter of substance raised in the Office Action and believes that the case is in condition for allowance. Withdrawal of the rejections and allowance of the application is therefore courteously solicited. Should the Examiner have any requests, questions or suggestions, the Examiner is invited to contact Applicant's attorney at the number listed below.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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